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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
NGUYEN, HANH N	

ART UNIT	PAPER NUMBER
2616	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

john@gorecki.us

Office Action Summary	Application No.	Applicant(s)	
	10/616,621	UNBEHAGEN ET AL.	
	Examiner	Art Unit	
	Hanh Nguyen	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *Amendment filed 12/3/07*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21,24,25 and 27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21, 24, 25 and 27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

From the response filed on 12/3/07, claims 1-21, 24-27 are pending. Appplicant canceled claims 22, 23.

Claim Objections

Claim 2 is objected to because of the following informalities:

In claim 2, if applicant intends to claim both " the routing table" and " entries in the routing table", then " are" used on line 2 is proper. If applicant intends to claim "the routing table" or "entries in the routingb table" , then " are" on line 2 is not proper and shhould be changed to " is" .

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Claims 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 17, 16, 18, 19, 20, 24 , 25 and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Balay et al. (US pat. 7,116,665 B2).

In claims 1 and 14, Balay et al. discloses a method of exchanging routing information between Virtual Private Network (VPN) sites (see fig.4;col.8, lines 5-30; process network traffic between first VPN and a second VPN) , the method comprising the steps of: receiving, by a network device, first routing information from a first virtual router based VPN site implemented using a VR-based first VPN model (see fig.4, step

410; col.8, lines 5-10; receiving packet at the PE node associated with the first VPN. AT step 420, fig.4, the first data packet is associated wit the first VRP), the first routing information being associated with a first VPN (see col.8, lines 7-10; the first data packet is associated with a first VPN transaction from a customer site);

Receiving, by the network device, second routing information from a virtual routing and forwarding (VRF) based VPN site implemented using a VRF based VPN model (see fig.4; step 412, col.8, lines 5-10; receiving second packet at the PE device associated with second VPN; at step 422, fig.4, col.8, lines 18-24; the second data packet is associated with VRF); the second routing informarion also being associated with the first VPN (see col.4, linws 10-11; the second data packet is associated with second VPN transaction from the same customer site) ; and

storing the first routing information and the second routing information together in a common routing table for the first VPN (see fig.4, steps 430 &432; col.8, lines 15-25; access routing table RIB to acquire first addressing/routing information and second addressing/routing information stored therein. It is indicated that there is a single RIB , a common routing table, wherein the address/routing information associated with the first VRP and the routing information associated with VRF is sstored in).

In claim 25, Balay et al. discloses the routing table contains entries (see fig.1, RIB 113), but the RIB 113 does not explicitly include a first tunnel VPN ID, a first tunnel route information, a second tunnel VPN ID, and a second tunnel route information. Shen discloses a first tunnel VPN ID , a first tunnel route information, a second tunnel VPN

ID, and a second tunnel route information (see fig.3A-3C). Therefore, it would have been obvious to include in the RIB 113 of Balay et al. VPN Ids, tunnel Ids to route packet between different VPNs.

In claims 4, 5, 17 and 19, the limitations of these claims have been addressed in claim 1.

In claims 8, 9, with the silence of Balay et al., Shen discloses the first.virtual router protocol connection is based on at least one of Open Shortest Path First (OSPF), Integrated Intermediate System to Intermediate System (Integrated IS-IS), Routing Information Protocol (RIP), Border Gateway Protocol (BGP); MP-BGP (see col.2, lines 50-55) which is used to exchange routing information over the VPN tunnel. Therefore, it would have been obvious to implement the routing protocols of Shen into Balay et al. in order to exchange routing information between these Open Shortest Path First (OSPF), Integrated Intermediate System to Intermediate System (Integrated IS-IS), Routing Information Protocol (RIP), Border Gateway Protocol (BGP); MP-BGP.

In claims 2, 3, 10 and 11, the limitations of these claims have been addressed in claims 1 and 25.

In claim 12, the limitations of this claim has been addressed in claims 8 and 9.

In claims 13 and 20 Balay et al. discloses (in fig.2,col.6, lines 40-60) establishing a first secure tunnel (First Internet connection 243 for a first VPN includes a Firewall, NAT services) between the first VPN site and the gateway network device, and wherein the step of receiving first routing information utilizes the first secure tunnel; and

establishing a second secure tunnel (second tunnel 242 represents a VPN tunnel includes one of NAT, firewall services, etc.) between the second VPN site and the gateway network device, and wherein the step of receiving second routing information utilizes the second secure tunnel. Balay further discloses QOS information (see claim 13).

In claims 6 ane 7, the limitations of these claims have been addressed in claim 1.

In claims 16 and 18, most of the limitations of these claims have been addressed in claim 1. However, it is inherent that the received packet should carry the header including destination, source address used for exchanging the routing information.

In claim 24, since the network device is not shown in the claim body, there fore, Balay et al. is relied upon which discloses a network device a first protocol connection for interfacing with a first Virtual Private Network (VPN) tunnel instantiated according to a first VPN model (see fig.2; col.6, lines 42-50; first tunnel 241 represents an Internet connection 243 for the first VPN); a second protocol connection for interfacing with a second VPN tunnel instantiated according to a second VPN model (see fig.2;col.6, lines 42-50; a second tunnel 242 represents a VPN tunnel for second VPN) ; a routing table (LFIB 222; fig.2) configured to associate routing information from the first VPN tunnel with routing information from the second VPN tunnel. (mapping routing information between different VPN traffic; col.6, lines 20-25).

In claim 27, further in claim 24, Balay et al. discloses border gateway protocol and MPLS (see col.3, lines 35-45).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Balay et al. (US Pat. 7,116,665 B2) in view of Shen (US Pat. 6,907,039 B2).

IN claim 15, Balay et al. does not disclose disseminating the correlated routing information to the VR-based VPN and VRF-based VPN. Shen discloses in fig.2, a network element 202., wherein routing information is distributed in forwarding table 219 and main routing table 213. The main routing table lists routing information associated with VR-B from routingtable 209; 211. The forwarding table 219 forwards packet received by VR-A 205 (see col.2, lines 45 to col.3, line 30). Therefore, it would have been obvious to disseminate correlated routing information to the VR-base VPn and VRF-base VPN in the RIB table of Balay et al.

Response to Arguments

Applicant's arguments with respect to claims 11-21, 24, 25 and 27 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kompella (US Pat. 7136374 B1);

Chava et al. (US Pat. 7,154,901 B2).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Nguyen whose telephone number is 571 272 3092. The examiner can normally be reached on Monday-Friday 8:30 AM - 5:00PM.)

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on 571 272 2092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hanh Nguyen

HANH NGUYEN
PRIMARY EXAMINER